Knowledge, Attitudes and Practices Regarding Use of Irradiated Meats and Pasteurized Eggs in Health Care Institutions, Universities, and Restaurants in Connecticut

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Background: Contaminated meats and eggs have been implicated as a major source of foodborne diseases. In recent years, several significant food safety technologies have been approved for commercial use: irradiation of meats and pasteurization of both egg-product and in-shell eggs. Widespread use could reduce the occurrence of Shiga toxin-producing Escherichia coli infection, salmonellosis, campylobacteriosis, listeriosis and toxoplasmosis by an average of 50%. As a prelude for a public health initiative to promote their use, a survey was undertaken to determine the extent to which these technologies are currently being used in Connecticut.

Methods: A standardized questionnaire was developed to assess the knowledge and attitudes toward the use of irradiated meats and pasteurized eggs and the extent to which they are currently being purchased and used. The surveys were mailed in February 2001 to the food services of all universities and acute-care hospitals and a representative sampling of long-term care facilities (LTCF) and restaurants in Connecticut. A second mailing to non-respondents was conducted in March 2001.

Results: Of the 391 surveys sent, 211 (54%) were returned: 24/34 (71%) from hospitals, 113/167 (68%) from LTCFs, 17/40 (43%) from universities and 57/150 (38%) from restaurants. Nearly all respondents reported using hamburger, chicken, and eggs in their operations. Seventy-five percent (75%) of facilities use pasteurized egg product (PEP), but no facility currently uses irradiated hamburger or poultry, and only 16% use pasteurized in-shell eggs (PSE). Restaurants (14%) and universities (56%) were less likely than LTCF or hospitals (96% each) to use PEP. The majority of respondents requested more information concerning PSE (66%) and most (79%) would be willing to consider buying irradiated meat products if given additional information. Significant predictors (p<0.05) of willingness to buy irradiated meat products include being a hospital or LTCF (88% vs 62%), having a manager with >20 years food service experience (89% vs 66%), believing that irradiation kills harmful bacteria (89% vs 63%), and believing that a person will not get irradiation exposure from eating irradiated meat (94% vs 63%). Significant predictors associated with the current use of PSE include having received prior information (44% vs 6%) and belief that consumers will accept the product (22% vs 7%). While 53% of respondents thought that DPH should encourage use of PSE, only 17% thought that DPH should encourage use of irradiated meats.

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